

IN THE CLAIMS:

Please amend claims 1, 10, 19, 25, 27, and 28 as follows. Please cancel claims 5 and 20 without prejudice or disclaimer.

1. (Currently Amended) An apparatus comprising:

a defining unit configured to define a capacity layer for a cell of a communications system, the cell comprising a coverage layer having a fixed coverage area provided by at least one carrier, the capacity layer comprising at least one carrier, each carrier in the capacity layer having a dynamically variable coverage area, wherein the defining unit is configured to vary the number of carriers in the capacity layer; to ~~thereby~~ dynamically vary a total ~~capacity~~ number of carriers in the cell,

wherein a power level of the at least one carrier in the capacity layer is variable such that the power level of the at least one carrier can be varied in dependence upon a distance of an associated mobile station from the base station.

2. (Previously Presented) An apparatus according to claim 1, wherein a power level of a carrier in a downlink of the coverage layer defines the coverage area of said cell.

3-4. (Cancelled)

5. (Canceled).

6. (Previously Presented) An apparatus according to claim 1, wherein a total transmission power for a downlink is divided between the coverage layer and the capacity layer of said cell in dependence on the coverage and capacity requirement of the system.

7. (Previously Presented) An apparatus according to claim 6, wherein power available for at least one of the coverage layer and the capacity layer is divided between carriers in the coverage layer and the capacity layer.

8. (Previously Presented) An apparatus according to claim 1, wherein the cellular communication system comprises a multi-carrier system.

9. (Previously Presented) An apparatus according to claim 1, wherein the cellular communication system comprises a single carrier system.

10. (Currently Amended) A method comprising:
defining, by a station, a capacity layer for a cell of a communications system, the cell comprising a coverage layer having a fixed coverage area provided by at least one carrier, the capacity layer comprising at least one carrier, each carrier in the capacity layer having a dynamically variable coverage area; and

varying, by the station, the number of carriers in the capacity layer; to ~~thereby~~
dynamically vary a total ~~capacity~~ number of carriers in the cell,

wherein a power level of the at least one carrier in the capacity layer is variable
such that the power level of the at least one carrier can be varied in dependence upon a
distance of an associated mobile station from the base station.

11. (Previously Presented) A method according to claim 10, further
comprising:

defining the coverage area of said cell based upon a power level of a carrier in the
coverage layer.

12-13. (Cancelled)

14. (Previously Presented) A method according to claim 10, wherein the
providing further comprises providing at least one carrier of said at least one carrier in the
capacity layer having a power level in the capacity layer which is variable.

15. (Previously Presented) A method according to claim 10, further
comprising:

dividing a total available power for a downlink between the coverage layer and the
capacity layer in dependence on the coverage and capacity requirement of the system.

16. (Previously Presented) A method according to claim 15, further comprising:

adding a carrier in the capacity layer, the adding including selectively reducing a power of at least one carrier in the capacity layer.

17. (Original) A method according to claim 10, further comprising:

transferring a connection using a carrier in the capacity layer to a carrier in the coverage layer to increase coverage for said connection.

18. (Original) A method according to claim 10, further comprising:

transferring a connection using a carrier in the coverage layer to a carrier in the capacity layer to increase capacity of the cell.

19. (Currently Amended) An apparatus comprising:

at least one transmitter configured to transmit a first carrier at a predetermined power level thereby defining a fixed coverage area of a cell of a communications system, and further configured to transmit a variable number of further carriers ~~thereby defining to~~ define, at least in part, a dynamically variable total ~~capacity-number of carriers in~~ the cell, wherein each of the further carriers has a dynamically variable coverage area,

wherein power levels of the further carriers depend upon a proximity of a mobile

station associated with a carrier to a base station.

20. (Canceled).

21. (Previously Presented) An apparatus according to claim 20, wherein a total power of the further carriers comprises a predetermined power, and

wherein a portion of said predetermined power among the further carriers is determined by a total number of carriers.

22. (Previously Presented) An apparatus according to claim 21, wherein the at least one transmitter is further configured to reduce power allocated to at least one carrier in response to an increase in the number of further carriers.

23. (Previously Presented) An apparatus according to claim 5, wherein the said power level is variable in dependence on a position of a mobile station.

24. (Previously Presented) A method according to claim 14, further comprising varying the power level of a carrier in the capacity layer in dependence on a position of a mobile station.

25. (Currently Amended) An apparatus comprising:

defining means for defining a capacity layer for a cell of a communications system, the cell comprising a coverage layer having a fixed coverage area provided by at least one carrier, the capacity layer comprising at least one carrier, each carrier in the capacity layer having a dynamically variable coverage area; and

means for varying the number of carriers in the capacity layer, to ~~thereby~~ dynamically vary a total ~~capacity~~ number of carriers in the cell,

wherein a power level of the at least one carrier in the capacity layer is variable such that the power level of the at least one carrier can be varied in dependence upon a distance of an associated mobile station from the base station.

26. (Cancelled)

27. (Currently Amended) An apparatus comprising:

first carrier transmitting means for transmitting a first carrier at a predetermined power level thereby defining a fixed coverage area of a cell of a communications system, and

variable number transmitting means for transmitting a variable number of further carriers ~~thereby defining~~ to define, at least in part, a dynamically variable total ~~capacity~~ number of carriers in the cell, wherein each of the further carriers has a dynamically variable coverage area,

wherein power levels of the further carriers depend upon a proximity of a mobile

station associated with a carrier to a base station.

28. (Currently Amended) A cellular communication system including at least one cell, said cell comprising:

a station configured to

provide a coverage layer having a fixed coverage area,

provide a capacity layer comprising at least one carrier, said at least one carrier having a dynamically variable coverage area, and

vary the number of carriers in the capacity layer to ~~thereby~~ dynamically vary the total capacity number of carriers in the cell,

wherein a power level of the at least one carrier in the capacity layer is variable such that the power level of the at least one carrier can be varied in dependence upon a distance of an associated mobile station from the base station.